

A METHOD FOR MAKING MULTISPECIFIC ANTIBODIES HAVING
HETEROMULTIMERIC AND COMMON COMPONENTS

ABSTRACT OF THE DISCLOSURE

The invention relates to a method of preparing heteromultimeric polypeptides such as bispecific antibodies, bispecific immunoadhesins and antibody-immunoadhesin chimeras. The invention also relates to the heteromultimers prepared using the method. Generally, the method provides a multispecific antibody having a common light chain associated with each heteromeric polypeptide having an antibody binding domain. Additionally the method further involves introducing into the multispecific antibody a specific and complementary interaction at the interface of a first polypeptide and the interface of a second polypeptide, so as to promote heteromultimer formation and hinder homomultimer formation; and/or a free thiol-containing residue at the interface of a first polypeptide and a corresponding free thiol-containing residue in the interface of a second polypeptide, such that a non-naturally occurring disulfide bond is formed between the first and second polypeptide. The method allows for the enhanced formation of the desired heteromultimer relative to undesired heteromultimers and homomultimers.